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| 10/568,065 | 02/13/2006 | Rudolf Nenno | 2003P12881WOUS | 8084 |
| 27799 7590 12/28/2009 COHEN, PONTANI, LIEBERMAN & PAVANE LLP 551 FIFTH AVENUE SUITE 1210 NEW YORK, NY 10176 | | | | |
| EXAMINER | | | | |
| AVERY, BRIDGET D | | | | |
| ART UNIT | | PAPER NUMBER | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/568,065

Applicant(s)

NENNO ET AL.

Examiner

BRIDGET AVERY

Art Unit

3618

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-22 and 24-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-22 and 24-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date 3/13/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of "and/or" on lines 2-21 is confusing because it is unclear what applicant is claiming.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 20-22 and 24-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakao (US Patent 6,856,866).

Nakao teaches an apparatus and method for controlling energy consumers/load on an energy accumulator (battery 5), the method including the steps of measuring at least one parameter that characterizes the state of charge of the battery (5), transmitting the parameter to a control unit (11), generating by the control unit a control signal as a function of the parameter, the control signal via the control unit (11) controls energy consumptions that are connected directly or indirectly to the battery (5) and calculating by the control unit (11) the energy consumption of the consumers/load on a planned route in advance. Re claim 21, the battery has a positive energy balance at the time of the control signal. Re claim 22, the system includes an ambient temperature sensor and a battery condition detecting device. See Fig 2 and elements (114, 115 and 116). Re claim 23, see the high discharge execution determining section (124). Re claim 24, the system includes a signal. The teaching of a visual display is suggested in col. 4, lines 21-27. Re claims 25 and 26, see the system controller (9).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-22, 24 and 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (US Patent 5,426,589) in view of Nakao (US Patent 6,856,866).

Kitagawa et al. teaches an apparatus and method for controlling energy consumers/load (1) on an energy accumulator (battery), the method including the steps of measuring at least one parameter that characterizes the state of charge of the battery, transmitting the parameter to a control unit (6), generating by the control unit a control signal as a function of the parameter, the control signal (W) via the control unit (6) controls energy consumptions that are connected directly or indirectly to the battery and calculating by the control unit (6) the energy consumption of the consumers/load (1) on a planned route in advance. Re claim 21, the battery has a positive energy balance at the time of the control signal. Re claim 22, the system includes an ambient temperature sensor and a battery condition detecting device. See Figs. 2, 3A and 3B. See also col. 2, lines 15-35. Re claim 24, the system includes a display device (8) to inform a driver. See col. 5, lines 1-9. Re claims 25 and 26, see col. 5, lines 24-67.

Nakao teaches a data mask defined by a high discharge execution determining section that receives output data based on estimates. The high discharge execution determining section carries out prioritization, filtering and normalization of different data formats.

Based on the teachings of Nakao, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to add a data mask to the system of Kitagawa et al. prevent overdischarge of the battery. Re claims 36, 37, where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under

35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing KSR v. Teleflex, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly, Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing KSR, 127 S.Ct. at 1740, 82 USPQ2d at 1396. Accordingly, since the applicant[s] have submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a) because it is no more than the predictable use of prior art elements according to their established functions resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

4. Claims 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. ('589) and Nakao ('866) and applied to claim 21 above and further in view of Kuroda et al. (US Patent 6,314,347).

The combination of Kitagawa et al. and Nakao lack the teaching of actuators connected to the control unit by means of which engine parameters can be adapted.

Kuroda et al. teaches actuators connected to the control by means of which engine parameters can be adapted.

Based on the teachings of Kuroda et al., it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify the combination of Kitagawa et al. and Nakao and add actuators to the control unit to regulate engine parameters to minimize fuel consumption of the engine to extend the distance the vehicle can travel on the battery charge.

Response to Arguments

5. Applicant's arguments with respect to claims 20-24-26-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIDGET AVERY whose telephone number is (571)272-6691. The examiner can normally be reached on Monday-Thursday from 8:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris, can be reached on 571-272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bridget Avery/

Examiner, Art Unit 3618

/Paul N. Dickson/

Supervisory Patent Examiner, Art Unit 3616